

# Ecosystems Video Episode

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## Science Unit

- *Ecosystems*, published by Science and Technology for Children (STC)
- The videotaped lesson is not included in the published unit. Elementary science coaches in Seattle Public Schools added the science and science-writing lessons to help students investigate the similarities and differences between models and the real world.

## Time Required for the Sessions

- Science session: 45 to 60 minutes (not including the investigation in the park)
- Writing session: 40 to 60 minutes
- These sessions were filmed in one afternoon, but in a typical classroom, the teacher would have taught the science session during her science time one afternoon and the writing during her literacy time the next afternoon.
- To help refocus the students' minds on the science investigation they had done earlier in the day, or the day before, the teacher begins the writing session with a class review of the shared reflection discussion they had had during the science session.
- To conduct the investigation in the park adjacent to the school, the teacher divided the class into four groups, and then she and three other adults led the groups through the outdoor investigation. The crew videotaped only the classroom teacher and her group.

## Time of Year

- This video episode was filmed in early December, partway through the students' first inquiry-based science unit of the school year.

## Students' Science and Science-Writing Background

- Most of the students in this school (if they have been there since kindergarten) have inquiry-based science experiences to varying degrees from kindergarten through fifth grade. Only a few of the students are exposed to this science-writing program in one or more of the grades.

## Teacher and the Classroom

- This teacher has just changed grade levels, so this is the first time she has taught this unit. She has taught inquiry-based science units and science writing in fifth grade for six years.

- This is a general education classroom in which two teachers job-share. One teacher teaches primarily math and reading in the morning; the teacher in the video episode teaches primarily science, science writing, and other forms of writing in the afternoon. (Social studies units alternate with science units.)
- To keep the video episode focused and of a reasonable length, the studio's producer included just footage of the science materials in the classroom and did not show materials for reading, math, and other content areas.
- The teachers usually use a document camera in much of their instruction, but because the projected images would not videotape well, the teacher wrote on the white board instead, which also works well.
- The teacher uses chart paper for making class data tables, charts, graphs, and lists of questions students want to investigate. She displays them where everyone can refer to them during discussions.
- The class chart to which the teacher adds entries is done on paper, partly so the teacher can remove it and move it elsewhere when she needs more space. (Teachers who teach this unit each year make a blank chart and laminate it the first year so that they can reuse it with each class.)

### **Students in the Class**

- This class has 27 fourth graders.

### **School Demographics**

- African American: 11.1%
- Asian: 15.7%
- Latino: 10.2%
- Native American: 0.3%
- White: 62.8%
- Free or reduced-price lunch: 27.7%
- Limited English proficiency: 15.4%